

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for separating and purifying a cationic protein using an electrodialysis apparatus,

wherein the electrodialysis apparatus comprises an electrodialysis bath having an anode and a cathode, and the electrodialysis bath comprises an anode compartment, a raw material loading compartment, a concentration compartment, and a cathode compartment in this order from the anode side,

wherein the anode compartment and the raw material loading compartment are divided from each other by a porous membrane made of a polymer having an anion exchange group,

the raw material loading compartment and the concentration compartment are divided from each other by a porous membrane made of a polymer having a cation exchange group, and

the concentration compartment and the cathode compartment are divided from each other by a microporous membrane, and

wherein the method comprises the steps of:

(1) loading a cationic protein-containing aqueous solution into the raw material loading compartment and loading an electrolytic solution into the anode compartment, the concentration compartment, and the cathode compartment;

(2) applying a current to the electrodialysis apparatus; and

(3) collecting a solution containing a cationic protein from the concentration compartment.

2. (Original) The method of claim 1, wherein the cationic protein is lactoferrin.

3. (Currently Amended) The method of claim 1-~~or~~2, wherein the current has a current density of 0.1 to 50 mA/cm².

4. (Currently Amended) The method of ~~any one of claims 1 to 3~~claim 1, wherein in the step (1), an anion exchanger or a chelating agent is further added to the raw material loading compartment.

5. (Currently Amended) The method of ~~any one of claims 1 to 4~~claim 1, wherein a face on the raw material loading compartment side of the cation exchange membrane is coated with an anion exchange membrane.

6. (New) The method of claim 2, wherein the current has a current density of 0.1 to 50 mA/cm².

7. (New) The method of claim 2, wherein in the step (1), an anion exchanger or a chelating agent is further added to the raw material loading compartment.

8. (New) The method of claim 3, wherein in the step (1), an anion exchanger or a chelating agent is further added to the raw material loading compartment.

9. (New) The method of claim 2, wherein a face on the raw material loading compartment side of the cation exchange membrane is coated with an anion exchange membrane.

10. (New) The method of claim 3, wherein a face on the raw material loading compartment side of the cation exchange membrane is coated with an anion exchange membrane.

11. (New) The method of claim 4, wherein a face on the raw material loading compartment side of the cation exchange membrane is coated with an anion exchange membrane.